

What is claimed is:

- 1 1. A method of transmitting information from a first device to a second  
2 device, comprising:  
3 receiving a user input at the first device;  
4 determining a class to which the user input belongs;  
5 identifying one of a plurality of sets of information which is associated with  
6 the class;  
7 looking up at least one datum in the identified set of information; and  
8 transmitting the datum.
- 1 2. The method of Claim 1, wherein the information is control information, and  
2 the datum is a control code.
- 1 3. The method of Claim 1, further comprising determining if a programmed  
2 association feature is active.
- 1 4. The method of Claim 3, wherein receiving the user input comprises  
2 recognizing a button press.
- 1 5. The method of Claim 4, wherein the first device is a remote control unit.

1 6. The method of Claim 1, wherein the second device is selected from the  
2 group consisting of televisions, set-top boxes, compact disc players, digital  
3 versatile disk players, tuners, radio receivers, and satellite receivers.

1 7. The method of Claim 1, wherein the second device is a remotely  
2 controllable entertainment device.

1 8. The method of Claim 7, wherein transmitting comprises generating an  
2 infrared signal.

1 9. The method of Claim 1, wherein the information is control information; the  
2 datum is a control code; receiving the user input comprises recognizing a button  
3 press; the first device is a remote control unit; the second device is a remotely  
4 controllable entertainment device; and further comprising determining if a  
5 programmed association feature is active.

1 10. The method of Claim 1, wherein the information is control information; the  
2 datum is a control code; receiving the user input comprises recognizing a voice  
3 command; the first device is a remote control unit; the second device is a  
4 remotely controllable entertainment device; and further comprising determining if  
5 a programmed association feature is active.

1 11. A method, comprising:

2 receiving a command to enter a programming mode;  
3 receiving a first one of a first set of user inputs, the first set of user inputs  
4 defining a plurality of devices; and  
5 receiving a second one of a second set of user inputs, the second set of  
6 user inputs defining commands.

1 12. The method of Claim 11, wherein receiving the command to enter the  
2 programming mode comprises processing signals which are received by a  
3 universal remote control unit.

1 13. The method of Claim 12, wherein receiving the first one of the first set of  
2 user inputs comprises detecting a button press on a universal remote control  
3 unit, and further comprising classifying the first one of the first set of user inputs.

1 14. The method of Claim 13, wherein detecting the button press comprises  
2 generating at least one signal representative of the button which is pressed.

1 15. The method of Claim 14, wherein classifying comprises determining a  
2 function class associated with the button which is pressed based, at least in part,  
3 on the at least one signal representative of the button which is pressed.

1 16. A method, comprising:  
2 receiving a user input;

3           generating a classification code based, at least in part, on the user input;  
4           accessing a first control code based, at least in part, on the user input and  
5           the classification code, the first control code stored in a memory; and  
6           transmitting the first control code.

1    17.    The method of Claim 16, wherein generating the classification code  
2    comprises a table-lookup operation.

1    18.    The method of Claim 16, wherein accessing the first control code  
2    comprises generating a memory address and reading out the contents of a  
3    memory location.

1    19.    The method of Claim 18, further comprising accessing a second control  
2    code based, at least in part, on the user input and the classification code.

1    20.    The method of Claim 16, wherein transmitting the first control code  
2    comprises converting the control code to infra-red signals.

1    21.    The method of Claim 16, wherein receiving the user input comprises  
2    detecting a button press and generating one or more electrical signals  
3    representative of the button press.

1 22. The method of Claim 16, wherein receiving the user input comprises  
2 detecting a button press and generating one or more electrical signals  
3 representative of the button press; generating the classification code comprises a  
4 table-lookup operation; accessing the first control code comprises generating a  
5 memory address and reading out the contents of a memory location; and  
6 transmitting the first control code comprises converting the control code to infra-  
7 red signals.

1 23. The method of Claim 24, wherein accessing the first control code  
2 comprises accessing data from a table based at least in part on the classification  
3 code, wherein data in the table represents a programmed association between a  
4 classification code and a target device.

1 25. A remote control unit, comprising:  
2 a user input signal source;  
3 a classifier coupled to the user input signal source;  
4 an address generator coupled to receive input from the user input signal  
5 source and the classifier;  
6 a control code memory coupled to receive input from the address  
7 generator; and  
8 a transmitter coupled to receive input from the control code memory.

1 26. The remote control unit of Claim 25, wherein the user input signal source  
2 comprises a keypad.

1 27. The remote control unit of Claim 25, wherein the classifier comprises a  
2 means for generating a classification code based on one or more signals  
3 received from the user input signal source.

1 28. The remote control unit of Claim 25, wherein the address generator  
2 comprises a means for generating a memory address as a function of signals  
3 received from the user input signal source and from a target lookup table.

1 29. The remote control unit of Claim 25, wherein the classifier comprises a  
2 processor and software code which is stored within the remote control unit.

1 30. The remote control unit of Claim 25, wherein the user input signal source  
2 comprises a voice recognition module.

1 31. An article of manufacture, comprising a machine readable medium upon  
2 which is included instructions which when processed by the machine will cause  
3 the machine to receive a user input; determine a class to which the user input  
4 belongs; identify one of a plurality of sets of information which is associated with  
5 the class; look up at least one datum in the identified set of information; and  
6 transmit the datum.

1     32.     The article of Claim 31, further including instructions which when  
2     processed by the machine will cause the machine to determine if a programmed  
3     association feature is active.

1 33. The article of Claim 32, wherein the information is control information, and  
2 the datum is a control code .

1     34.     The article of Claim 31, wherein transmitting the datum comprises  
2     generating an infrared signal.

1 35. The article of Claim 31, wherein receiving the user input comprises  
2 recognizing a voice command.